

THE MEDICAL AND SURGICAL REPORTER.

No. 1180.]

PHILADELPHIA, OCTOBER 11, 1879.

[Vol. XLI.—No. 15.]

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

THE TREATMENT OF SPINAL DISEASES.

BY E. H. COOVER, M.D.,
Of Harrisburg, Pa.

In the MEDICAL AND SURGICAL REPORTER of April 13th, 1878, I offered a paper, entitled, "Suggestions in the Treatment of Spinal Diseases and Curvature," in which I claimed the use of a closely fitting jacket or corset, made from several layers of unbleached muslin, stiffened by a solution of the silicate of soda, as being an appliance which, in my experience, offered a greater measure of success than any other hitherto adopted. I instanced a number of cases in which this treatment rewarded me with the most gratifying results, and which satisfied me beyond question that if adopted by the profession it would insure a more uniform success in the treatment of this class of diseases. Since the appearance of that article I have made a number of improvements in the mechanical construction of the jacket, and as my professional duties will not afford me opportunities to reply in detail to the many letters of inquiry with which my professional brethren have favored me, I have concluded to place the results of my recent experiments and experiences before them through this medium. I do not want to be understood as detracting from the credit hitherto accorded eminent practitioners who have preceded me in this direction, nor do I wish to claim the method of treatment as original with myself. My claim is solely upon the mechanical construction of the jacket, and I feel certain that a fair comparison with others will show that the process employed by me in its

manufacture admits more readily of subsequent alterations, thus enabling the surgeon to adapt it perfectly to the particular case under treatment.

The process as employed is as follows: From unbleached muslin are cut four pieces, shaped like the fronts and back of a coat or bodice, and long enough to reach below the pubes and hip joint. The patient being clothed in a tight-fitting, seamless garment, and seated upon a stool something higher than an ordinary chair, the back pieces are laid on and wetted with the solution of silicate of soda. The top and bottom edges are laid carefully together and the intervening edges being cut purposely will show an elliptical opening; this is done for the reason that when the pieces are pressed to place, the edges will meet without overlapping, thus making the jacket conform to the natural curve of the back. Until recently it was not considered necessary to get that curve until the jacket had been formed, but now I find it can be done by this method upon the patient, thus securing a better fit, while it really occupies no more time in adjusting.

The fronts are then put on in the same manner, after which a silicated soda bandage, from three to four inches wide, is passed around the body, from a point immediately under the axilla to the hip joint; this fixes the body pieces and secures a firmer structure upon which to build the more substantial part of the apparatus, besides obliging the jacket to conform strictly to the body of the individual. Braces of tin—slit at short intervals along their entire length and nearly an inch from the edges toward the centre, like a many-tailed bandage, in order to make them more pliable in adjusting—three inches wide at

top and five or six at bottom, reaching from near the axilla to a point beyond the crest of the ilii, are next placed in position and covered by pieces of muslin wet with the silicated solution. Other braces of tin, an inch wide, and extending from the junction of the fourth rib with the os sternum to a point near the symphysis pubis, are placed, leaving a space of about an inch or more on each side of the median line, where the jacket will be cut for the purpose of eyeleting. Still another brace of tin, one and a half inch wide, is placed along the spine, shaping it also to meet the contour of the parts. The patient is now extended with Dr. Sayre's apparatus, and a bandage similar in dimensions to the one alluded to prior to applying the braces, is carried around the jacket, over the braces, being saturated with the solution as it advances, applied by a brush in the hands of an assistant. Care should be taken not to "trice the individual up so high that the support afforded by the heel is lost, as, in my opinion, without this precaution the spinal column is too much straightened by the weight of the lower extremities, and the natural curvature thereby lessened. This latter bandage secures the tin braces firmly in position, and retains them there without further support. A second or outer bodice, made exactly like the first, is now framed and applied, using the silicate of soda freely in order to secure its uniform adhesion to all the inequalities which the surface of the jacket now presents. This completes the jacket for the present, and the patient being lowered, is carefully laid upon a firm bed (care being taken in the transit to disturb the set of the jacket as little as possible) and allowed to remain at perfect rest for a period of four or five hours, at the end of which time the silicated material will have become sufficiently firm to admit of further manipulation. The jacket is removed from the body by making an incision along the centre in front and carefully slipping it off. Before cutting, however, it should be carefully trimmed, or marked where trimming is necessary, under the arms and at the bottom. It may be cut off at the top, both back and front, as low as the patient may desire, provided always that it is not desired so low as, in the judgment of the physician, will interfere with the proper support of the affected structures. At the bottom it should be made to extend at least two inches below the crest of the ilii, and cut off in the direction of the symphysis pubes, so that the lower part of the jacket, when the patient is seated, will not rest heavily on the thighs, thus pushing it up and out of place, rendering the patient uncomfortable

and defeating the object intended, a perfect support.

If after cutting the jacket prior to its removal the edges should overlap when brought together, showing too much material, they should be trimmed off so as not to meet, by one-half to one inch. This is very necessary, as changes frequently take place in the fullness of the body of the patient, and if the jacket does not press firmly and evenly upon the whole surface, a condition impossible at all times if the edges meet, the support necessary to the comfort of the patient is lost. Always remember, in trimming off edges, to remove equally between the two sides, where the centre of the jacket is the part manipulated, otherwise it will give the apparatus a one-sided appearance. For convenience in the further mechanical construction, I remove the jacket to my office, where I can have more conveniences at command. It is yet in a semi-plastic condition, the heat of the body not being sufficient to render it as hard as it must be to answer the purpose for which it is intended. I place it upon a table and remove the inner bodice, smooth out all the folds or wrinkles, taking great care not to destroy the shape. This done, it is removed to a hot stove, and placed over or beside it, not near enough to scorch, supporting it artificially, if necessary, to preserve the shape. When the material is sufficiently hardened, I place it over a rounding block, and with a round-faced hammer pound down all the roughnesses and projections left upon the inner surface. I then line the inner side with pieces of muslin, using as an adherent the silicated solution, and bind the arm spaces and all the trimmed edges with pieces of muslin cut bias, not sewed on, but attached by the use of the soda. This is done to prevent the separation of the different cut edges, and render the jacket more durable. The front edges are now eyeleted and supplied with a suitable lace or draw string. Several rows of holes, about the size of a No. 15 or 16 catheter, should be made in the jacket, with a steel punch, over a hard block of wood. This will allow the escape of the natural exudations of the body, and will afford all necessary ventilation. All openings should be made from the inner surface outward, in order to prevent the formation of prominences on the inside of the jacket. The instrument is now ready to be placed upon the patient. In order to ascertain whether the curve in the jacket, particularly that of the region commonly termed the "hollow of the back," is correct, measurements should be taken of the patient and compared with those of the jacket.

This is most conveniently done with a common yardstick, by placing it upon the protuberance and measuring the arc described between with a common rule. The anterior curve, or that denominated the hollow of the back, is ordinarily from an inch and a quarter to an inch and a half, and the jacket should be made to conform to it, in order to give that support to all the anatomical structures which is necessary to a successful treatment. If any alteration in the jacket is necessary to its proper conformity, it may be accomplished by slitting the jacket at that part and removing an elliptical piece; the opening thus made is drawn together by punching holes in either edge, and drawing together by means of a lacer of linen tape.

I have now carefully and minutely described



the mechanical construction of my jacket, and feel assured that if my professional brethren will follow my process strictly success will follow their efforts, not only in the construction of the instrument, but in affording relief to those of their unfortunate patients to whose infirmities support is rest; and rest is the natural therapeutic agent for the relief of pain.

If the patient is a female, it is my custom to support the breasts, before applying the jacket, with strips of adhesive plaster, keeping them well up to their natural position; I then further protect them from undue pressure by breast shields. When about to adjust the jacket upon the patient finally, he or she should be extended in Dr. Sayre's apparatus, which is well designed for that purpose, taking care not to go beyond

the former suspension, or, in other words, depriving the patient of the support afforded by the heels. The jacket is then put around the body and set to its place. It is now ready for lacing. Begin with the long lacer, about the third eyelet hole from above down, and go down as far as the umbilical region, where, drawing it through and making a loop long enough to tie on either side, proceed lacing until the lower edge is reached, where it is fastened. The object in leaving the tie loop in the umbilical region is to draw it tightly together at that point, thus making extension and counter extension at the same time, the bony structures of the scapula and iliac region serving as fulcrum, as it were, and the space between the weight. Then take a short lacer or linen tape and lace it through the upper holes, drawing it as tight as the patient will allow, and tie it. The object of this short and separate lacer is to afford the patient, if a female, an opportunity to relieve the mammae from undue pressure. No dinner pad is necessary with this jacket, as the patient may find relief after a hearty meal by simply loosing the lacer or tie loop for an hour or two, when it is again tightened. In females who suffer from uterine displacements this jacket affords a perfect support, and in no single instance have I learned of any ill effect resulting from the use of it, on young or old.

It is light, and quite inexpensive; the quantity of the solution of silicate of soda used is about three pounds, to make a jacket of the largest size, but as it has to be applied hurriedly, at least one-half is wasted, not leaving more than a pound and a half in the jacket, when dried, to add to its weight—specific gravity 1.2755 in summer and a little higher in winter—costing only 35 cents, and muslin at eight cents a yard will not add greatly to the cost of the whole. The silicated solution does not set as quick as the plaster of Paris, nor is it liable to crack or crumble, and it is more durable. The lacing admits of its removal at any time, for the purpose of cleansing the body, and after the first adjustment no extension of the spinal column is required by the apparatus above named; the patient takes it off and puts it on without assistance. The weight of the jacket is fifteen ounces to three pounds, according to size. The time required to mould it on the body is from thirty to forty minutes.

[Dr. Coover adds the notes of a number of cases, which we regret the crowded condition of our columns prevents us from inserting. They exemplify the principles which he has above detailed.—ED. REPORTER.]

BELLADONNA IN DISEASES OF CHILDREN.

BY CHARLES H. HALL, M.D.,
Of Macon, Ga.

A German writer says the subjects to whose diseases belladonna corresponds most exactly, are those whose cerebral functions are most liable to become irritated, or whose brains, and consequently heads, have the greatest development, *i.e.*, children. It is a well known fact that children bear and require proportionately larger doses than adults. In all the active hyperæmia of the brain of children it is of conspicuous benefit. This hyperæmia is a very common accompaniment of the febrile diseases of childhood, and frequently blinds us as to the true diagnosis of their affections. We must wipe away this hyperæmia, or convulsions are apt to supervene, which will still more complicate the case and increase the danger to our little patients. Belladonna and the bromides will control this congestion, and however threatening the condition may seem, we may rationally offer hope to parents or friends. Where there is more than hyperæmia, and inflammation is present, or a meningitis, belladonna is no longer the remedy; the thermometer will aid this diagnosis. If in any of the diseases of children I find fever, with a red face, a disposition to sleepiness, and the eye reddish, indicating a possible brain complication, I constantly prescribe belladonna, and am scarcely ever disappointed in its effects. It does not seem to benefit anæmic and bloodless looking children so favorably as those who are florid, and it is especially beneficial to those who are plethoric and corpulent. In the early stages of infantile bronchitis, where there is considerable fever, and the wheezing just commencing, this drug will frequently seem to cut short the attack. If it is not so successful it will greatly modify the fever and relieve the congested mucous membrane—sore throat, inflammation of fauces, "all those parts behind the mouth which become visible when the jaws are widely opened and the tongue depressed." This is one of the commonest troubles which beset us in our daily rounds, and to our patients one of the most unpleasant. I was taught to give nauseants, purge, use counter-irritants, cauterize, give anodynes. If relieving "quickly, pleasantly and safely" is our desire, we have in belladonna a remedy that will seldom disappoint us; especially is it indicated where the membrane has a red, velvety look. If we have a temperature higher than one hundred and one, aconite combined with it makes the recipe all that the majority of these cases need. Two

or three days will accomplish more than six to eight under the old plan of treatment. Its remedial power is not confined to the throat alone; any inflammation of the buccal mucous membrane is benefited by it. In stomatitis it is one of the best and most speedily successful remedies. I have frequently and fully tested this, giving and withholding in parallel cases. Last summer (1879) there seemed to be an epidemic tendency to stomatitis and I (as often before) gave it frequent and full trial. It is specially useful where you see your case early and can give it in the first stages of the disease.

In fact, belladonna appears to have curative powers in all inflammations of mucous membranes. From its now well-known, and I believe universally admitted, power in controlling excessive perspiration, we can readily believe in its pleasantly influencing such inflammations. Speaking of its controlling perspiration reminds me of its peculiar efficacy in lessening the temperature in the fevers of children which are characterized by sweating, although the temperature is very high. I have to-day (June 28th, 1879) two patients, one six, the other eight years; they each have had fever for ten days, temperature running 101 to 102 morning; evening 104 to 105; yet their skin was never dry, generally bathed in perspiration. Quinine, mineral acids, spirits of mildereri, baths, etc., apparently had no good effect; temperature still high. Two days' use of tincture belladonna in the one, and three days in the other, gave me a morning temperature of 100, and an evening 101 to 102. I have for years considered high temperature and perspiration an indication for belladonna. This is a "wrinkle," as Fothergill would express it, that remembering has aided me in relieving such fevers.

We are all acquainted with Mr. Liston's use of this drug in erysipelas. I use it in all the eruptive fevers of children. The exanthemata all possess the common property of febrile symptoms and cutaneous eruption. I avail myself of the benign influence of the drug, without reference to what the eruption may be, believing that it prevents the localization of throat trouble in scarlet fever, mitigates the bronchial troubles of measles, and is the "physiological antagonist" of the diseased action in all these diseases. A constant physiological action of belladonna is "a peculiar bright red flush," not only appearing on the face and neck, but over the whole body. That common trouble of children, incontinence of urine, is more constantly cured by this agent than any other; this use of the drug is, I believe, recognized by therapeutists.

It is one of our best remedies in an irritable state of the bladder, when it has been caused by cold. Indeed, all the vesical troubles of childhood are greatly benefited by it. In retention, I not only give it internally, but use the ointment over the perineum and hypogastrium. The external application of belladonna gives great relief in the myalgias and other painful affections of early life.

In the commencement of whooping-cough, before the convulsive stage is developed, I rely upon it, almost to the exclusion of other drugs, and have found very few cases that it does not modify. Other remedies are better suited to the subsequent stages of the disease.

The dentition of children is very constantly attended with diarrhoea, vomiting, etc. Although belladonna will of itself not relieve these morbid conditions, yet it will greatly aid our mercury, alkalies and astringents, by the influence it exerts over the nervous phenomena which is invariably associated with this condition. Calm this nervous irritation and we will much and more speedily relieve than if we neglected this important factor. It does more than influence the nervous element in this disease; where the actions are large and watery it positively lessens the size of the actions, although not their frequency. Recollecting its influence on the mouth and throat, the dryness it always produces, we can readily understand its beneficial effect, lessening the secretions of the intestinal mucous membrane. There is a general disposition in the profession to mistrust the inherent tendency to recover in almost all diseases. This disposition causes them actively to interfere, to treat disease as an enemy, and to endeavor to rout it by spoliative and aggressive measures. This is, to me, not philosophical nor in accordance with nature's laws, as we see them in daily operation; we should gently aid this inherent disposition toward recovery; proportion our help to the necessities of the case. I am convinced that the beneficial effect of belladonna in the class of diseases which I have mentioned is frequently lost by the dose being too large. I believe that the manner of its employment has everything to do with its efficacy. The true medicinal dose is far below the physiological dose. It is true, that the physiological dose frequently aggravates the disease, whereas the medicinal dose will favorably influence and hasten the recovery. My rule is to diminish the quantity I am giving whenever I see any approach to its physiological effects. It is true, that children bear belladonna better than adults, yet I have seen many very easily

brought under the physiological effects. Therefore, as a rule, I give small doses, but whatever dose I select I give often, every fifteen or thirty minutes, until some amelioration or change occurs, and then make the interval greater. In this way I speedily arrive at my conclusions in regard to both the dose to be continued and the drug's suitability to the case in hand. Given in this way its delightful therapeutic effects are obtained in the diseases I have enumerated. A well made tincture of the leaves is to be preferred to all other preparations.

HOSPITAL REPORTS.

JEFFERSON MEDICAL COLLEGE HOSPITAL.

SURGICAL CLINIC OF S. W. GROSS, M.D.

REPORTED BY DR. F. WOODBURY.

Spindle-celled Sarcoma over the Olecranon Process.

Mrs. A., a widow, 61 years of age, came to the out-patients' department on the 20th of last August, on account of a tumor, which was seated over the posterior face of the right elbow joint. She then stated that she first observed a small swelling, two years previously, at the spot indicated, which was painless, and of moderately soft consistence. Its further growth was slow until two months ago, or about June 20th, when it began to increase rapidly and be the seat of a gnawing pain, which was worse at night, and frequently materially interfered with her rest. On the 6th of August it began to ulcerate at its summit, and the suffering was aggravated; and a week subsequently the ulcer was the seat of a pretty free hemorrhage. From the model, which was made at the time by Dr. Nardyz, you will observe that the conoidal tumor surmounted the region of the olecranon process and the tendon of the triceps muscle. The skin was of a bluish-red tint, pervaded by enlarged capillary vessels, and attenuated. At its base the neoplasm measured eleven inches in circumference, and was three inches high, and its apex was ulcerated to the extent of an inch in diameter. In outline it was lobulated; its consistence was soft and elastic, and apparently fluctuating over the more prominent bosses; and its temperature was three degrees higher than that of the opposite arm. The veins in the immediate vicinity of the growth were more prominent than in the natural condition, but the lymphatic glands along the course of the vessels and in the axilla were not enlarged.

During the three weeks and a half which have elapsed since the patient first came under observation, the tumor has undergone very marked changes. Thus, its circumference has increased two inches and its height three inches, while the ulcer measures three inches and a half in diameter. The bosses have also increased in size, and the largest one fluctuates distinctly, and is approaching ulceration. During the past week the pain has greatly decreased under the local ap-

plication of a strong solution of acetate of lead and opium, but the ulcer was the seat of another hemorrhage three days ago, which my resident, Dr. Kneudler, controlled by compressing the brachial artery.

From the history of the case, the peculiar appearances of the morbid growth, its situation and mobility, I have no hesitation in pronouncing the tumor to be a sarcoma developed in the subcutaneous connective tissue over the olecranon process. In former days, or when our knowledge of the minute structure of neoplasms was imperfect, such a growth would have been pronounced a fungus hematodes, or hematoid carcinoma; but the idea of carcinoma may at once be dismissed, as comparatively recent researches show that the connective tissues are never the primary starting points of that class of tumors. In making a differential diagnosis as to the variety of tumor present in this case, I may say that the only primary neoplasms of the subcutaneous connective tissue of the upper extremity, exclusive of the hand, are lipoma, sarcoma, fibroma and myxoma. Of these, the fatty tumor is the most common; sarcoma comes next in point of frequency, but it occurs in the proportion of only one to five of the former growth; fibrous tumors are rare; and myxoma is still more uncommon. A fatty tumor in this situation should be pendulous or pedunculated. Its growth would be slow and painless; its consistence would be doughy; the skin would not be altered in texture or color, nor would there be ulceration. A myxoma has the same lobulated outline as a lipoma, but its consistence is soft and fluctuating, and it grows more rapidly. Its differentiation from sarcoma would depend upon the absence of ulceration, hemorrhage, and alterations in the skin. I have never heard of a mucous tumor being seated in this region, and its occurrence is, moreover, so rare, that it may be excluded. Fibrous tumors of the connective tissue never attain so large a bulk as the growth before you. They increase slowly and their consistence is firm.

Sarcoma may appear at any time of life, from infancy to old age, but it is most common between the twentieth and fortieth years. Two weeks ago I saw a child only twenty-four months old, with a myeloid sarcoma of the upper extremity of the ulna, which began to develop at three months of age. This afternoon I will examine the body of a mulatto boy, four years and three months old, who died of extensive sarcomatous disease, the primary tumor having originated from the medullary canal of the left humerus, from which, as a focus of general infection, secondary tumors have appeared on the left half of the head, in the left femur, the right humerus, and in the abdominal lymphatic glands. Only three weeks ago I removed, in this building, from a female, forty-one years of age, a cystoid round-celled sarcoma of the mamma. There is now in one of the private rooms a gentleman, upward of fifty, whose thigh will be amputated at the hip joint on next Saturday, on account of a recurrent hemorrhagic sarcoma of the soft parts of the thigh. The next case that I shall bring before you is one of

woman, fifty-nine years of age; and I have in the museum a specimen of small round-celled sarcoma of the bladder, which was taken by Dr. Hearn, a few days ago, after death, from one of our out-patients, fifty-nine years of age. Hence, you will observe that sarcoma is met with at all periods of life, and is just now very common among those who present themselves here for relief.

Excision of the morbid mass is out of the question in this case, as it would be impossible to remove all of the infiltrated tissues about its base. Hence I shall amputate the arm at the junction of its middle with its lower third, making skin flaps by cutting from without inward, with a circular incision of the muscles, and reflecting the periosteum for one inch before dividing the bone.*

Having made a section of the tumor and the underlying bones, which was attended with the escape of straw-colored fluid, Dr. Gross described it in the following terms:—"The tissue of the tumor is for the most part succulent, glistening, striated, and yellowish-white, with here and there gelatinous areas and a few cysts, the largest of which equals a hazelnut in size. The older portion, or that which lies nearest to the olecranon process, is deeply blood-stained. The triceps tendon is involved in the disease, but the ulna itself is free, the tumor, which developed in the subcutaneous connective tissue, being merely attached to the outer layer of its investing periosteum. From the peculiar appearances of its structure, I do not hesitate to pronounce it a spindle-celled sarcoma undergoing myxomatous and telangiectatic degenerations."†

Giant-celled Sarcoma of the Lower Third of the Radius.

The next case that I bring before you is that of a married colored woman, 59 years of age, who has a large spherical tumor of the lower third of the forearm, without, however, involvement of the wrist joint. She states that she first observed, about twelve months ago, an immovable growth, as large as a hickory nut, two inches above the wrist, and on the radial side of the limb, from which it continuously extended in every direction, until, as you now perceive, it surrounds the entire lower third of the forearm, and measures three inches more in circumference than the same limb at a corresponding point. In outline it is spherical and bosselated, the bosses having appeared during the past three months. It is the seat of preternatural heat; but the skin, veins, and lymphatic glands are entirely normal. On making a careful examination I find that while the tumor has for the most part a firm feel, the bosses alone being soft, at the mid-point of

* Esmarch's apparatus having been applied, the limb was removed in the manner stated by the operator. Two arteries only required ligation, and oozing from the paralyzed vessels was controlled by douching the flaps with hot water. The parts were then brought together by interrupted sutures and adhesive strips; a tent inserted into the most dependent angle of the wound, for drainage; and the stump was covered with lint imbued with sweet oil, and confined by a roller.—Reporter.

† The correctness of Dr. Gross' diagnosis was verified by minute examination of stained sections, made by Dr. W. G. MacConnell.—Reporter.

its palmar aspect there is a sensation of a partial bony shell, and that the outline of the ulna can be traced upon its inner side. Hence I conclude that we have to deal with a sarcoma growing from the medullary canal of the radius, and limited by an osseo-periosteal capsule.

Sarcoma of the bones, improperly termed osteosarcoma, may consist of a structure made up of spindle, round, or giant cells, and, in accordance with the prevalence of one or the other of these elements, is termed spindle-celled, round-celled, or giant-celled sarcoma, the last variety being synonymous with myeloid tumor. In many specimens, however, no particular form of cell predominates, in which event we speak of a mixed sarcoma. Up to a comparatively recent period these tumors of the bones were called cancers, but we are now pretty well satisfied that there is no such a disease as a primary carcinoma of the bones. Despite this fact, however, sarcoma is par excellence the malignant tumor of the osseous system, although it is not so destructive to life as carcinoma of the glands, and it is malignant because it is an atypical connective tissue neoplasm, just as carcinoma is an atypical epithelial neoplasm.

Tumors of the long bones are, in the order of their frequency, sarcoma, chondroma, osteoma, osteoid chondroma, fibroma, and myxoma, the first being more common than all the others combined. They may be of central or peripheral origin, or develop from the medullary cavity or from the soft layer of the periosteum, the tumors of central origin being the most frequent. The sarcomata are all malignant, that is to say, they infect the adjacent tissues and occasion secondary deposits in the internal organs, but without, as a rule, contaminating the intervening lymphatic glands. The degree of malignity varies in accordance with the seat and structure of the growth, the periosteal forms and the small spindle- and round-celled tumors being the most destructive to life. To be more accurate, they may be classed in the order of their malignity, as follows: Periosteal spindle-celled, periosteal round-celled, periosteal osteoid, central round-celled, central spindle-celled, and central giant-celled. Like similar neoplasms of the soft parts, they are met with at all ages, but are most frequent from the fifteenth to the thirty-fifth year, the average age at which they manifest themselves being the twenty-seventh year.

As I am informed that the patient is under the influence of the anæsthetic agent, I will merely add that the partly bony and partly periosteal capsule denotes that the tumor originated in the medullary canal of the radius. It is certainly not a small spindle or a small round-celled sarcoma, and the diagnosis rests between a large spindle-celled and a giant- or multinuclear-celled tumor. Although the radius is only exceptionally the seat of myeloid or giant-celled sarcoma, and although that disease is very uncommon after the fiftieth year, I am disposed to regard the tumor as being of that nature, from its slow growth, and the absence of pain and changes in the integuments, the subcutaneous veins, and the lymphatic glands, and from the excellent general condition of the patient.

After the application of Esmarch's bandage, I

will amputate the arm at its middle by flaps made by cutting from without inward. Instead of amputation, I might excise the affected bone; but the existence of the soft bosses, and the encircling of the limb by the growth, denote that the neighboring tissues are probably implicated by extension of the disease, and that it is adherent to the periosteum of the ulna and the interosseous membrane. Hence, excision would be likely to be followed by recurrence. Besides, the operation would involve the opening of the wrist-joint, which would be liable to be followed by suppuration of the joint, thereby enhancing the dangers of operative interference, and necessitating secondary amputation, to save life.*

* The limb was removed in the way indicated, and three arteries were ligated. Sections of the tumor, made by Dr. MacConnell, disclosed that it was an exquisite example of giant-celled tumor.—Reporter.

MEDICAL SOCIETIES.

BRITISH MEDICAL ASSOCIATION— SECTION OF OBSTETRIC MEDICINE.

(Continued from page 296).

The chair in this Section was taken by Dr. George H. Kidd, of Dublin. The first subject for discussion was

Intra-uterine Medication.

Dr. Lombe Athill remarked that (excluding all cases in which tumors of the uterus or poly-pus existed, and those resulting from anæmia) it would be found that the symptoms indicating the necessity of intra-uterine medication were: 1. Derangement of the menstrual function, specially hemorrhagia and dysmenorrhœa; 2. Uterine catarrh; 3. Pain, specially that caused by pressing the point of the sound against the fundus; one or more of these being present. With respect to the method to be employed in carrying out intra-uterine medication, Dr. Athill objected to intra-uterine injections, and found ointment inefficient. He employed the following agents only—the fluids being applied by means of a probe, around the extremity of which cotton was wrapped, and the solids through a tube or *porte caustique*; carbolic acid in solution; tincture of iodine; iodized phenol; nitric acid; solid nitrate of silver; zinc points; crayons of iodoform. Carbolic acid was the agent Dr. Athill recommended for ordinary use, being at once safe and efficient. Iodized phenol he recommended in cases requiring more energetic treatment, but considered it inferior to nitric acid; this latter agent, he pointed out, should never be applied to the intra-uterine surface, unless through a cannula or tube. This was a point on which he strongly insisted; and further, that the patient should be confined to bed for a day, or even more, subsequently; and he expressed his conviction that if these precautions were adopted no unpleasant results need be feared.

Dr. Robert Battey, of Ga., introduced to the Association his use of iodized phenol, already familiar to the American profession.

Dr. E. J. Tilt, though not much in favor of

this method, admitted, however, that intra-uterine medication was wanted in the following cases:

1. Incoercible blood-loss, resisting all remedies and menacing life; 2. When life or reason is menaced by the intensity with which internal metritis reacts on the system, rather than by the amount of purulent discharge to which it gives rise; 3. When internal metritis causes an aggravated complication of dysmenorrhœa by menorrhagia independent of ovaritis, and menacing life or reason; 4. Membranous dysmenorrhœa; 5. In habitual abortion, independent of syphilis and ovaritis, and seemingly caused by some morbid state of the lining membrane of the body of the womb. When internal metritis led to dangerous flooding, and in cases of membranous dysmenorrhœa, Dr. Tilt recommended intra-uterine injections with undiluted tincture of iodine. He deprecated the injection of a solution of nitrate of silver in such cases, and in other cases of internal metritis requiring intra-uterine treatment, on account of the severe pelvic diseases and death which had succeeded. In such cases he preferred to place in the womb five or six grains of solid nitrate of silver; but, as he had seen this followed by severe peritonitis, and as he knew this to have caused death, he expressed himself ready to welcome a better plan of treatment.

Dr. Byford (Chicago) believed that intra-uterine medication could be adopted in a great many instances with safety. When he applied it, he looked a good deal to getting the patient into a proper condition; made her live quietly for some time beforehand; and kept her in bed for two or three days after the application, which measures he found to secure success invariably. He thought that the application should be delayed after menstruation. He should hesitate to make an application of nitric acid to the uterus in a case where the canal and mouth of that organ was very much diminished in size; and he did not believe that these were the class of cases to which it was applicable. This treatment should be succeeded by more constitutional means. He used glycerine and extract of belladonna.

Dr. T. M. Madden presented a paper on

Post-partum Hemorrhage.

Having dwelt on the constitutional conditions predisposing to flooding, and the preventive measures by which this might be warded off, even in those who had been habitually subject to this accident on former occasions, he considered the causes of flooding and the management of labor so as to prevent subsequent inertia or irregular contraction of the uterus. The ill effect, in this respect, of the premature application of the forceps before the full dilatation of the os uteri, and also the production of hemorrhage as the result of undue delay in the second stage, were next referred to. During labor, when there was any reason to anticipate flooding, the preventive measures recommended by the author were: the rupture of the membranes in the first stage; the use of stimulating enemata of a strong infusion of ergot, or the hypodermic injection of ergotine, in the second stage; and a firm, unremitting manual pressure over the fundus uteri, from the time the child's head escaped from the

mulva until the completion of the third stage, which should never be hastened by traction on the cord, and the permanent contraction of the uterus was secured. In nineteen cases of flooding, the solution of perchloride of iron was resorted to; in eighteen of these the hemorrhage was thus arrested, and in one instance it failed. Dr. Madden, however considered that the ordinary mode of using this styptic, viz.: by a syringe passed up to the fundus uteri, was a very hazardous proceeding, and exposed the patient to great and needless twofold danger of death from embolism or peritonitis. He, therefore, recommended instead the direct application of the strong liquor ferri perchloridi to the bleeding vessels by a sponge soaked in this fluid, and carried up by the hand into the uterus, and retained there until a firm contraction was produced. Some cases were referred to in which hemorrhage that had resisted all other treatment was thus arrested; and Dr. Madden, therefore, regarded this as the most effectual method of treating flooding. At the same time, he admitted that it was not free from danger, or even to be adopted without grave necessity. Some of the other remedies employed in the treatment of post-partum hemorrhage, including the hypodermic use of ergotine, galvanism, and cold and hot injections, were referred to. The treatment of collapse from flooding by brandy, opium, stimulating enemata, hypodermic injection of sulphuric ether, and transfusion, were considered. Dr. Madden related a case in which a patient, apparently at the last extremity, was rescued from death by the subcutaneous injection of ether, which he regarded as being in many instances a substitute for transfusion. The latter operation was, he considered, destined to fill an important place in the future practice of midwifery. But, as yet, no method of transfusion has been suggested which met the requirements of what, to be useful, should be a generally feasible as well as an effectual operation.

Dr. Wm. Walter read the report of eleven cases of

Post-partum Hemorrhage Treated by Intra-uterine Injection of Hot Water.

The temperature of the water used ranged from 100° to 120° Fahr.; and the utmost care was taken that the tube (Hayes') reached well up to the fundus; and that there was afterward no impediment to the escape of the water from the uterus. The results in the eleven cases, particulars of which were given, led Dr. Walter to the conclusion that the hot water treatment offered some advantages, in being generally accessible and not disagreeable to the patient; but that, as a means of contracting the uterus, it was, in his experience, not to be relied on. Nevertheless, he hoped to continue the method; and he advised that the temperature of the water should be ascertained by the thermometer in every case. The recent researches of Dr. Max Runge tended to show that, if success was to follow the hot water treatment of post-partum hemorrhage, the temperature of the water must not be so high as it was in Dr. Walter's cases. In all the cases but one the injection was followed by relaxation and dilatation of the entire

uterus; if contraction occurred, it was but temporary: but, when the temperature of the water did not exceed 104° Fahr., the uterus contracted without being afterward paralyzed. No appreciable effect was produced on the pulse and general condition of the system. After the failure of the injection, the application of the induced current was successful in several of the cases.

Dr. B. Battey gave an account of

15 Cases of Battey's Operation.

The mortality had been 13½ per cent. Regarding the results obtained at the end of six months, separating the recovered cases into three classes, there were three cases (a) of removal of but one ovary, three cases (b) of imperfect removal of both ovaries, and seven cases (c) of complete removal of both ovaries, which compared as follows: Morbid conditions wholly disappeared in class a, 1; in class c, 6; partly disappeared in class a, 1; in b, 1; not benefited, class a, 1; class b, 2; too recent to determine, class c, 1. *Present condition.*—Perfect health, class a, 1; class c, 4; comfortable health, class a, 1; class b, 1; class c, 2; not benefited, class a, 1; class b, 2; too recent to determine, class c, 1.

Dr. Graily Hewitt spoke of

Vomiting in Pregnancy.

He believed that the vomiting of pregnancy was one of the reflex disturbances produced by resistance to the normal expansion of the tissues at and immediately surrounding the internal uterine orifice. The success that had attended dilatation by Dr. Copeman's method was to be explained in two ways: (1) by the change of the flexed condition of the uterus—which the author had pointed out to be a usual cause of the sickness—to a condition of comparative straightness; (2) by the relief of the compression and condensation of the tissues by the artificial dilatation. Relief from vomiting during pregnancy might be obtained (1) by elevating the body of the uterus, and thereby taking off the pressure at the internal os; or (2) by dilatation of the cervix after the method of Dr. Copeman. His own opinion, based on observation, was that the postural treatment was generally sufficient.

The President said he had learned at the beginning of his career, from Dr. Henry Bennet's book, that inflammation of the cervix uteri was a frequent cause of the excessive vomiting in early pregnancy; and he had since made it a rule to examine the uterus in such cases, and frequently found the condition described by Dr. Bennet; and, on touching the inflamed surface freely with the solid nitrate of silver, the vomiting generally ceased.

Dr. H. Byford, of Chicago, read a paper on

Treatment of Fibroid Uterine Tumors by Ergot.

His positions were—1. When properly administered, ergot frequently very greatly ameliorates some of the troublesome and even dangerous conditions of fibroid tumors of the uterus, e.g., hemorrhage and copious leucorrhœa. 2. It often arrests their growth, and checks hemorrhage. 3. In many instances it causes the absorption of the tumor, occasionally without giving the patient any inconvenience; while, at

other times, the removal of the tumor by absorption is attended by painful contractions and tenderness of the uterus. 4. By inducing uterine contraction, it causes the expulsion of the polypoid variety of the submucous tumor. 5. In the same way, it causes the disruption and discharge of the intramural tumor. He said that, in administering ergot in cases of fibrous tumor, the action of the drug would depend on the degree of development of the fibres of the uterus, and on the position of the tumor with reference to the serous or the mucous surfaces; the nearer the mucous surface the better the effect. A good result might be expected under the following conditions: smoothness of contour of the tumor, denoting uniform development; hemorrhage; a lengthened uterine cavity; and elasticity of the tumor. He would expect large fibro-cystic tumors to resist the action of ergot; and a good result was not to be expected in cases of uneven nodulated tumor, absence of hemorrhage, shortness of the uterine cavity, and hardness of tumor. It was not essential to give ergot hypodermically, though this was a very efficacious method; it might be given by the mouth, in suppositories, etc. If the object were to cause painless absorption of the tumor, the dose should be moderate, and not too frequently repeated; if it were desired to have the tumor expelled, full and increasing doses should be given often, and continued till the object was attained. The preparation which he used was Squibb's fluid extract of ergot. He said, in conclusion, that he disclaimed any expectation that ergot would supplant all other modes of treatment.

The President stated that he had tried the ergot but had no good results from it in this class of cases.

Dr. Hodgen, of St. Louis, presented a paper and specimen of fibro-myoma of the placenta.

AMERICAN GYNÆCOLOGICAL SOCIETY.

This Society convened for its fourth annual meeting, at the hall of the Johns Hopkins University, Baltimore, Md., September 17th, 1879. The President, Dr. T. Gaillard Thomas, in the chair.

FIRST DAY.

There was a full attendance of members and also of many local physicians. Addresses of welcome were read by Dr. W. T. Howard and Professor D. Gilman.

Papers were read, by Dr. J. P. White, on intra-uterine medication, and on iodized phenol for this purpose, by Dr. Robert Battey, of Georgia. In the discussion which followed, Dr. J. Marion Sims said he believed there was a much shorter method of treatment, namely, that afforded by the use of the curette. He had recently seen several cases of cervical catarrh which had been cured by first dilating the cervix and then scraping away the fungoid granulations, and subsequently cauterizing the denuded surface with the actual cautery. This method of treatment was also favored by Dr. Taylor, who, however, used instead of the actual cautery an iron

only slightly heated and applied rapidly over the seat of the disease.

Dr. Howard thought that the great difficulty in treating cases of this kind was in not sufficiently making out a correct diagnosis of just what the trouble within the uterus is before beginning the treatment. It was especially necessary first to get rid of all uterine flexions. The use of strong acids or nitrate of silver was altogether too dangerous.

Dr. Barker had used cones of iodoform after first dilating the cervix with sea-tangle.

Dr. Byrne believed that a perfectly healthy uterus would not tolerate any liquid within its cavity. Nitrate of silver in solution, or chloride of zinc he thought, were most dangerous agents, and should never under any circumstances be applied within the uterus. The further the uterus we are dealing with has departed from a healthy condition, the greater will be its toleration of internal medication.

Dr. Goodell believed that great care should be used in the introduction of sponge tents. He always preferred to accomplish what dilatation was needed with one introduction of the tents, and thought that the best results were attained by using a small sponge tent surrounded by one or more laminaria tents. He had used the phenol recommended by Dr. Battey, but in combination with hydrate of chloral. He also thought that the pain often experienced by women as the probe or sound passes the internal os is occasioned by the presence at that point of a fissure or tender cicatrix. Such cases are often cured by dilatation at that point.

Dr. Thomas was, as a rule, entirely opposed to intra-uterine medication. He considered that such applications made within the os internum were very dangerous, as well as generally useless. There is usually some cause for the catarrhal condition, and it is not infrequently due to a flexion or misplacement. In cases where fungosities exist, the curette is of great value. In many cases a lacerated cervix is the cause of the difficulty, while in others there are constitutional causes to be removed. In cases of true idiopathic catarrh, which are always very rare, intra-uterine medication is of value.

Papers on the treatment of puerperal septicæmia by intra-uterine injections, by Dr. Jenks; and on idiopathic septicæmia, by Dr. Chadwick, were read. The latter favored the use of permanganate of potash for this purpose.

In the discussion Dr. Engelman mentioned accidents from the use of carbolic acid in this manner. Dr. Barker had witnessed five deaths from these medications. Dr. Goodell favored the use of permanganate of potash, and recommended the delivery of the placenta with the patient lying on her back, as this aided in preventing air from entering the uterine sinuses.

SECOND DAY.

Dr. Busey read a paper on the "Pathology of the Cicatrices of Pregnancy." He referred to the value of these scar-like streaks and spots as a sign of existing or previous pregnancies. Then followed a discussion of the anatomy of the stræ and the nature of the lesion giving rise to these appearances. The investiga-

tions of Kustner, accompanied with photographic illustrations of sections of stræ prepared by him, were presented, together with original microscopical examinations of the normal integument and of the stræ. From comparison of these histological appearances, Dr. Busey reached the conclusion that the stræ are not caused by rupture of the Malpighian layer, as generally believed, nor by separation of the fibres of any of the layers of the skin. He then discussed the several methods of vesicle formations, and concluded that the stræ of pregnancy do not constitute any form or stage of vesiculation, but that the hydrophic condition not infrequently observed is to be ascribed to the transudation of fluid into the lymph spaces of the connective tissue. In conclusion, he maintained that the stræ of pregnancy are localized atrophies of all the constituent layers of the integument, with compression and partial obliteration of the lymph spaces.

Dr. Mundé read a paper on "Prolapse of the Ovary," at the conclusion of which Dr. Thomas, the President, delivered the Annual Address, on the "Relations of Gynecology to Surgery."

In discussing Dr. Mundé's paper, Dr. Barker stated that constipation was a powerful agent, not only in causing this displacement, but also in keeping the organ displaced. He believed that very little good was to be obtained from the use of pessaries for effecting a replacement of the ovary.

Dr. Busey believed that the structural changes observed in these cases were the result, and not the cause, of the displacements.

Dr. Byrñe exhibited a galvano-cautery for the performance of kolpo-cystotomy.

In a paper on the size of the uterine cavity in childbed, Dr. Sinclair stated that its average length in the third week is 3.02 inches, that in primiparæ averaging 2.94 inches, and in multiparæ 3.21 inches.

THIRD DAY.

The annual meeting for business was held in the morning. The following officers were elected to serve the ensuing year:—

President, Dr. J. Marion Sims, New York. Vice-Presidents, Dr. W. T. Howard, Baltimore; and Dr. Robert Battey, Georgia. Council, Dr. W. Goodell, of Philadelphia; Dr. E. W. Jenks, of Chicago; Dr. A. D. Sinclair, of Boston; and Dr. A. J. C. Skene, of Brooklyn. Secretary, Dr. J. R. Chadwick, of Boston. Treasurer, Dr. P. F. Mundé, of New York. The following were elected Fellows of the Society: Dr. John Scott, of San Francisco; Dr. Edward L. Duer, of Philadelphia; Dr. R. Stansbury Sutton, of Pittsburgh; and Dr. J. W. Underhill, of Cincinnati.

It was voted that the next meeting of the Society be held in Cincinnati, and the time was fixed for the first Wednesday in September, 1880.

The reading of papers began with a paper by Dr. I. E. Taylor, on the Early Application of the Forceps in the First Stage of Natural Labor. In it the writer strongly advocated the application of the forceps within the uterine cavity whenever there were symptoms of an approaching tedious labor.

Dr. Howard believed that great advantage

could be gained by the use of hot water vaginal injection, and that when the os uteri was dilated so as to admit of version being performed that operation was preferable to the introduction of the forceps.

Dr. Goodell read a paper based on clinical notes on the Hypertrophic Elongation of the

Cervix Uteri, in which the writer favored, under certain circumstances, the amputation of the cervix with the actual cautery.

Papers were read, by Dr. Johnson, on Misanthropic Labors, and by Dr. Reeve, on Extra-uterine Pregnancy, and the Society adjourned.

EDITORIAL DEPARTMENT.

PERISCOPE.

Treatment of Croupous Pneumonia.

Dr. D. W. Prentiss gives his treatment as follows, in the *New Orleans Medical and Surgical Journal*:—

I have never used cold baths in this disease, but have prepared water at a temperature of 90° and reduced it ten degrees during the fifteen minutes occupied in administering it.

Not that I believe any risk would be run by making the bath cold, but experience goes to show that quite as great reduction of temperature is obtained from the above graduated bath, with certainly greater comfort to the patient, and less violence to the prejudices of friends.

If we consider for a moment the *modus operandi* by which the bath is an effective measure in reducing temperature, I think we will be disposed to admit that the warm bath should have the preference.

The skin is the organ by which the balance of temperature is preserved between the internal structures and external surface, and through the agency of the blood. A very great extent of surface in the capillary vessels of the skin is exposed to the cooling influence of the external air with every pulsation of the heart, and the extent to which the surplus heat of body combustion is got rid of is exactly in proportion to the amount of blood so exposed to the air in the skin, and the condition of the skin at the time.

The application of cold contracts the capillaries of the skin and drives the blood away from the surface toward the internal organs.

This is the effect of a cold bath, and although the reduction of temperature in the blood still remaining in the skin is greater than from a tepid bath, still the aggregate effect will be less.

The warm bath relaxes the skin and invites blood to the surface, while the difference in temperature between water at 90° and fever heat (104° or upward) is quite sufficient to give a decided clinical result.

In addition, the absence of shock and greater feeling of comfort to the patient is an advantage of the warm bath not to be overlooked.

In some of these cases, where the convenience of a bath tub was not to be had, a common washing tub was used, the patient sitting in it, covered over the shoulders with a blanket, and this was found to be an efficient substitute.

Whenever the patient became prostrated from

the fever, or oppressed by the dyspnoea, the baths were discontinued and quinine relied on as an antipyretic. In children, if the baths were the occasion of struggling and screaming, they were not insisted on, the wet towel and quinine being resorted to.

The dose of quinine given to adults was from grs. xv to grs. xx, and was found to be sufficient.

The reduction of temperature varied in different cases, from 1.5° to 4.7°, and lasted about fourteen hours from the time of administration. A dose given at midday would show decided effect in three hours, reach its maximum at nine o'clock p.m., and the temperature would begin to rise about two o'clock a.m.

In the severer cases the temperature would be again the following morning as high as before its administration. In the milder cases the fever did not appear to rise as high any more after the first dose of quinine.

In some of the cases it produced a decided hypnotic effect, every full dose being followed by quiet sleep.

Dr. S. C. Busey said he had frequently noticed the same effect. He had had his attention first called to it by Dr. Jas. C. Hall, of this city, a most acute observer, who had been in the habit for years of giving quinine at bedtime, with the double purpose of promoting sleep and at the same time avoiding the annoyance of noises in the head occasioned by this agent.

Stimulants were administered as required. Carbonate of ammonia as a special cardiac stimulant where the respiration was embarrassed.

Milk and beef tea were relied on for nourishment.

The Combination of Iron and Chloride of Ammonium in Heart Disease.

In the *Practitioner*, Prof. T. Grainger Stuart cites a case of cardiac disease, and adds these general remarks:—

This case afforded an example of a condition by no means uncommon, but of which I have been unable to find a satisfactory description in books. The first glance at the patient leads one to notice the pallor, the very anxious expression, the restlessness, the pale lividity of the lips, the throbbing of the carotids, and perhaps of the temporal arteries: while the patient complains of giddiness, perhaps of headache, certainly of breathlessness, and of a debility that amounts at times to faintness. He is somewhat relieved by food, and unless there is some dropsical effusion to prevent it, he is easier in the recumbent posi-

tion. But he obtains very little sleep. The explanation of his various symptoms is readily found. The pallor and the head symptoms are due in part to anæmic deterioration of the blood and partly to imperfect filling of the arteries supplying the face and brain. The throbbing is due to the ill-filled condition of the arteries, contrasting with their sudden temporary filling during the ventricular systole; while the breathlessness and the lividity are connected with the dilatation and the partial failure of the heart's action. Sometimes the distress is aggravated by the existence of dropsical effusion, and it seems to be specially severe when the pericardium is its seat. Such cases sometimes prove rapidly fatal by sudden syncope, and sometimes death follows upon a long agony, characterized mainly by symptoms of cerebral anæmia. These cases do not seem ever to recover spontaneously.

Treatment by the administration of cardiac tonics, and especially of iron, leads in many cases to decided improvement. The form which I find best is the tincture of perchloride, but it must be given in large quantity. I have gradually been led to give it in larger doses; sometimes even to the amount of twenty minims every two hours, more frequently every four hours, continuing its use for days together. In many cases the patients speedily experience relief, and before long there is manifest improvement. As in the patient whose history I have given, they are enabled after a time to leave the hospital and return to work.

But there is great difficulty in carrying out this plan of treatment, from the gastric and hepatic derangement which so frequently follows upon the use of iron. During the past two years I have sought to meet this difficulty by combining chloride of ammonium with the iron, $\frac{1}{2}$ gr. to each minim of the tincture. During that time I have repeatedly been thus enabled to administer iron in large doses in combination with chloride, to patients who otherwise could scarcely have used iron. It will be observed that in the case now recorded the iron speedily led to dyspeptic symptoms, so that it was impossible to persevere with its use. But the addition of the chloride both relieved the existing dyspepsia and enabled us to continue to administer the iron in large doses, and for a considerable time. So far as I can judge, iron is the only remedy which could have saved the life of the patient at the time, and but for this effect of the chloride of ammonium, I do not know how I could have administered iron so freely as to suffice.

The Sedative Treatment in the Excitement of the Insane.

Dr. J. N. Campbell says, in the *Lancet*, as a sedative, given continuously, I have principally used bromide of potassium in combination with tincture of cannabis indica, or with tincture of hyoscyamus, compound tincture of valerian, and occasionally tincture of opium. Alone, bromide of potassium is valueless in the treatment of acute excitement; its immediate action is too weak; in time it produces bromidism; but I think it acts like a drag in combination, keeping up a sedative effect. In the 101 cases in which I gave

a sleep producer, I had a note made of when the patient became quiet and slept, as far as possible in each case, and recorded it. In these cases I almost entirely used chloral, and am satisfied with its certainty of action and harmlessness when given for short periods. I gave it in doses of from twenty to thirty-five grains (seldom exceeding the latter) in a glass of sherry, administering the medicine after the patient had been in bed an hour without sleeping. I simply gave it to cause sleep. If a patient falls asleep, he will in nearly every case go on sleeping. I did not wish it to produce a long-lasting, drugged sleep. I am quite sure that when first introduced chloral was given in too large doses, too frequently and for too long periods. I now never use it for any great length of time. Much care should be taken to ensure quiet surroundings at night for recent acute cases. Frequently new excitable cases cannot sleep in an associated dormitory, but if put in a room by themselves they may. With the chronic patients I find I gave a sleep producer, in all, to thirty-three, for different and repeated periods, during the term of years I am referring to, and in many instances the medicine was given more for the sake of others who might be disturbed than for the sake of the recipient. I find that I need not now give so many draughts to cause sleep; the chronic patients sleep better. I used sedatives continuously during the day in the case of twenty-six chronic patients during these five years, to some of them for several periods of each year. In many cases I missed an excited attack and observed and recorded the course of the excitement as to its duration and intensity.

For several years I have been attempting to arrive at some conclusion as to the value of sedative treatment; and as to its real effects, if any, other than the merely quieting for the short time its action lasted after each dose, I still find difficulty in the matter. In recent cases laboring under acute excitement, it is impossible to predicate with anything like certainty whether the attack will be of long or short duration; there is nothing that I have noticed in any case to enable one to do so, though the age of the patient and the cause and variety of insanity may allow one at times to form a tolerable prognosis. I reported in 1875 three cases of short attacks of insanity, in which the excitement was very intense, but short-lived; and since then I have seen several similar cases, but nothing that I could notice in such or other cases of excitement would enable me to form a reliable prognosis as to the duration of the attack of excitement. This is what makes it so difficult to estimate with accuracy the value of medicinal or other treatment in excitement. In my practice during the last five years, I have noticed cases where periodic excitement came on usually at tolerably regular intervals, and ran a given course as to duration and intensity, at times vary much. In several cases that I especially observed, when treated during an attack, both with and without sedatives, I noticed that, when treated by continued sedatives, they remained longer in a stupid or mentally clouded state after the excitement passed off than when sedatives were not given.

Treatment of Diphtheria.

The following is from an article by Dr. C. D. Kingsford, in the *Lancet* :—

Since 1858 very many cases of diphtheria of varying type, some of a most malignant form, have occurred in my practice, and by adhering to the plan of treatment advocated the results have been most favorable. For several years I have discontinued to apply nitrate of silver and other topical remedies, and only made use of a weak gargle of Condry's fluid; but within the last twelve months I have painted the membranous deposits with lactic acid, one part in three of water, and in severe cases an efficient nurse has been instructed to do this every four hours. Quite lately, too, at the suggestion of Mr. D. de Berdt Hovell, I have brushed the throat twice a day with perchloride of iron and glycerine, in equal proportion, which acts by corroding, as it were, the membrane, causing it to pucker, and to be thrown off apparently earlier than would otherwise happen, also—no small matter—by entirely removing all fetor. But as the chief object of this communication is to put prominently forward the internal treatment, it may not be out of place to detail the plan I usually adopt. For an adult I order tincture of the perchloride of iron, forty to sixty minims, chlorate of potash ten grains, glycerine one drachm, water one ounce, to be given every two or three hours during the day and night; and as the case progresses toward recovery I prefer to increase the interval rather than to diminish the dose. This treatment should be strictly carried out from the moment the disease is recognized, so necessary is it to counteract the poison circulating in the system. An aperient, if indicated, may be given early, but not an emetic—at least I have never seen any benefit effected by one. In fatal cases I have invariably had to regret that larger doses of iron had not been given from the commencement of the attack. Nourishment, such as milk, beef tea, eggs, etc., must be given every two or three hours throughout the day and night, and so great is the tendency to exhaustion that there should never be any hesitation in having the patient aroused for food and medicine. With regard to stimulants, from the very circumstance of their being almost always required, some care should be shown in the choice and mode of administration; indeed, from want of judgment in this respect, I have seen very baneful results. I find, as a rule, an ounce and a half of port wine given every three or four hours better borne and more sustaining than frequent doses of brandy, and far less liable to excite the sensorium; very rarely, if ever, is it wise to have recourse to more than one form of stimulant. The indiscriminate use of various kinds of wine and different sorts of spirits is to be especially deprecated. A constant supply of steam generated in the room, but not too near the bed, is a desideratum in the management of all cases of diphtheria, and becomes absolutely necessary whenever the air passages are involved.

When the larynx is affected there is grave cause for anxiety; still, even here I would advise steady perseverance in the iron treatment, for

from long experience I have learned that as when pneumonia occurs in the course of fever we dare not relax in our general treatment of the fever, so also in these laryngeal attacks we must remember that we are engaged in combating another stage only of the same disease (diphtheria), but which from its situation is now threatening to close the door against the ingress and egress of the very breath of life. In these cases I have frequently been induced to try special treatment, but have always had to return to the iron and potash mixture, and to regret the time and ground lost by the deviation.

Carbolic Acid a Remedy Against Bee Stings

Dr. Klamann publishes, in the *Allgemeine Medicin. Central Zeitung*, a case of bee sting, followed by acute symptoms of poisoning, which was relieved within a very short time by a subcutaneous injection of carbolic acid. The patient, a robust, strongly built young woman, was stung in the lower lip by a bee. Soon afterward she vomited; her face became flushed; the right half of the face began to swell, and the swelling soon spread over the whole face. The woman fainted, and was laid on her bed. When Dr. Klamann saw her, soon afterward, he found her unconscious; the face was dark red, and much swollen; the sclerotics were injected, the lips cyanotic, the lids oedematous, the fingers and toes pale and cold. The patient did not answer when spoken to; the pulse was 72, hardly perceptible; respirations 24. Nothing abnormal could be detected in the heart, but the impulse was weak. The extremities were immovable. Cold compresses were immediately applied to her head, and five milligrams of carbolic acid in solution were injected under the skin, near the spot where she had been stung. At the same time sal volatile was held to her nose. In about a quarter of an hour the swelling of the lips and eyelids began to abate visibly, consciousness returned gradually, and the mouth could be opened. The tongue was somewhat swollen, but the patient could swallow without much difficulty. In the course of three-quarters of an hour the patient had three attacks of convulsive trembling of the whole body, together with violent twitchings of the muscles of the face. During each of these attacks the patient was very restless; her face became flushed, and she threw her head about. After each attack her face became suddenly pale; the skin of her whole body grew cool, and the pulse could hardly be felt. Gradually, however, the symptoms of poisoning disappeared, the patient could open her mouth and swallow a few drops of spirit of sal volatile in water. She passed a good night, and the next day went about her work as usual. The lower lip remained slightly swollen during the next few days. A fortnight before the accident she had been stung by a bee in the left forearm; after which the whole limb became swollen, and urticaria broke out over the whole body. The arm was still swollen when she was stung in the lip; and the injection of carbolic acid appeared to exercise a favorable influence on the arm, which, on the next day, had recovered its natural size.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—The fourth of the American Health Primers is entitled, "Eyesight, and how to Care for it," by Dr. George C. Harlan. It describes in clear language the anatomy of the eye, the physiology of vision, the use of the ophthalmoscope, the more common injuries, diseases and defects of the eye; the choice and employment of spectacles, and concludes with a series of practical suggestions for the cure of the eyes, and a discussion of the effects of school life upon the sight. Published by Lindsay & Blakiston. Price, cloth, 50 cents.

—In a little work of fifty pages, entitled "First Step in Chemical Principles," Dr. Henry Leffmann endeavors quite successfully to make clear to beginners those points in theory, notation and nomenclature which give them the most trouble to understand. His language is clear; the illustrations ample, and undoubtedly the study of this little treatise will smooth to the student the very rugged paths of modern chemical theory and nomenclature. Published by Edward Stern & Co., Philadelphia.

—The connection of the hepatic functions with uterine hyperemias, fluxions, congestions and inflammations, is the subject of a reprint by Dr. L. F. Warner, of Boston. The main object is to prove that the successful treatment of uterine hyperemias, fluxions, congestions and inflammations must often depend as much upon measures that are termed constitutional as upon those that are strictly local, and that sometimes without them it is impossible.

BOOK NOTICES.

Student's Pocket Medical Lexicon: Giving the Correct pronunciations and definitions of all words and terms in general use in medicine and the collateral sciences, the pronunciation being plainly represented in the American phonetic alphabet, with an appendix containing a list of poisons and their antidotes, abbreviations used in prescriptions and a metric scale of doses. By Chas. Longley. Phila., Lindsay & Blakiston, 1879. Cloth. \$1.00.

This small book with the long title is one of more promise than performance. It bears evidence on its face that it is a compilation by a

person quite ignorant of medical science. Why one not even a member of the profession should undertake to write a medical dictionary, is hard to imagine. It abounds with names of useless drugs and obsolete terms, and omits most of these recently brought into general use. Thus we have looked in vain for athetosis, atelectasis, autophony, anode, cathode, hospitalism, neurasthenia, plessimetry, seborrhea and a number of other words common in medical language. Its definitions are often absurdly erroneous; thus the retina is defined to be "the expansion of the optic nerve which forms the inner coat of the eye;" angina pectoris is "a spasm of the nerves of the chest;" angular artery is "the termination of veins near the inner angle of the eye;" schirrhous is "a hard tumor affecting the glands, often ending in cancer;" cancer is "schirrous tumor terminating in a malignant ulcer;" autopsy, "personal inspection." These definitions are evidently by one ignorant of the rudiments of medicine, who has borrowed without judgment, from obsolete authorities. We recommend all students to avoid the purchase of the book.

A Guide to Surgical Diagnosis. By Christopher Heath, F.R.C.S., etc. Philadelphia, Lindsay & Blakiston, 1879. Cloth, 8vo, pp. 214. Price \$1.50.

This essay on surgical diagnosis groups surgical affections anatomically, and under this anatomical division aims to group the symptoms of each disease in the order in which they would strike a close observer. Thus, in reference to the head, we first have tumors and wounds of the scalp, fractures of the skull, concussion and compression of the brain, affections of the face, the eye, the ear, the nose, the mouth, and the jaw. Of these, under, for instance the nose, we have the symptoms detailed of inflammation, erysipelas, acne, lipoma, ulceration, chronic discharge, ozæna, necrosis, suppuration of the antrum, polypus, vascular growth and obstruction, the whole compressed into three pages. Necessarily this necessitates an amount of condensation for which completeness must be frequently sacrificed. The author seeks to make amends by giving only the most prominent diagnostic features; and as he is a skillful surgeon and finished writer, he succeeds remarkably well within the self-imposed limits he has chosen. The whole field of surgery is included, differential points being prominently brought into light, often by means of the tabular method. It is, indeed, the most satisfactory book of the class which has come to our notice.

THE
Medical and Surgical Reporter,

A WEEKLY JOURNAL,
 Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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**WHAT PROGRESS THE METRIC SYSTEM IS
 MAKING AMONG US.**

Last week we inquired of the three most prominent drug stores on the most fashionable street in this city, what proportion of their current prescriptions were written in the metric system. One answered about one per cent.; the second, very few except those received from abroad; the third, that they seldom received a prescription in this system, except from foreign physicians. These three stores probably do as large a prescription business as any three in the city; and they are located where they would first feel the effect of any such novelty.

The conclusion from this is that the introduction of the metric system, so far as Philadelphia is concerned, is an absolute failure.

There are many reasons for this, and good ones. When closely examined, there is by no means that simplicity about the metric system, nor is there that fixity about it, which its admirers have claimed. Its unit is notoriously based on a mathematical blunder, the meter not being the ten-millionth part of a quadrant of the meri-

dian of Paris, as was supposed by those who first adopted it. It is wrong one meter in every five hundred and fifty-five thousand. Practically it is found very inconvenient to convert *accurately* apothecaries' into metric weights and measures. The *American Medical Biweekly* gives this example:—

"Suppose one desirous of prescribing twenty pills of arsenious acid, one-thirtieth of a grain each, the following would be the procedure: One grain is equal to sixty-five thousandths of a gram; a thirtieth of a grain is equal to one-thirtieth of sixty-five thousandths of a gram; this calculated is twenty-five ten-thousandths of a gram, and twenty times twenty-five ten-thousandths is five-hundredths of a gram, the amount the prescription would call for. This is a simple illustration, but it is enough to show that it is not as ready a method as is claimed for it; after the calculations are made the mere writing it is greatly simplified, but this is simple enough as it is."

In spite of care exercised in writing prescriptions, the metric system certainly offers greater facilities for errors in putting them up. A leading and skillful pharmacist in this city urged, in a conversation with us, that this alone is a sufficient objection to its introduction. Already, dangerous mistakes have been reported, and even fatal ones.

Another very great annoyance is that of prescribing fluids of all kinds by weight only; the volumes or cubic quantities are varying and uncertain. This is well put by Dr. J. F. BALDWIN, in a paper he read before the last meeting of the Ohio State Medical Society. Describing his experience in the use of the system, he says:—

"The principal trouble I have had has been in the feeling of uncertainty, when prescribing liquids, as to what would be the bulk of the resulting mixture. The familiar '*q.s. ad*—' of the old method sufficed to make the mixture equal a certain bulk; but the new system, at least as used in France and Germany, has no such convenient device. Not only does the difference in specific gravity lead to inaccuracy, but the various solids that are added also affect the bulk to a greater or less degree; so that it is impossible to predict, with anything like the degree of accuracy desired, the amount of medicine the patient will get."

Further, there has been no uniformity in the system itself as it has been presented to the American public. The Boston Metric Bureau advocates the Continental system, in which liquids are invariably prescribed by *weight*; the

Chicago Metric Club recommends the use of cubic centimeters—in other words, *volumes* for liquids; the United States Marine Hospital Service allows either to be used, believing that the difference of eight per cent. is “insignificant.” But this is a great concession, and hardly to be admitted. Moreover, as the specific gravity of syrup is 1.317, should the prescriber assume that thirty grams of syrup equal an ounce, which would be true as regards water, and were he to use it as a vehicle, he would unwittingly increase the dose of his active drug one-fourth, which might entail disastrous results.

Various suggestions have been made to overcome these difficulties. By one of them it is stated in its favor that the approximate equivalents of grains and grams may be secured by means which might almost be styled mechanical. Let the physician prescribe his liquids, powders or pills, in a quantity equal to sixteen doses. Then every gram or cubic centimeter of active ingredient will be represented in each dose by a single grain or a single *minim*. But this is often inconvenient to do.

It has also been demanded in some quarters, whether we should humor the foreigners by adopting their plan of prescribing. Thus the *Michigan Medical News* says, editorially—

“We know of no reason why we should dance when our German and French brethren pipe, and especially when the music they give us is in such wretched time.

“America and England, together with English-speaking people the world over, are very slow to adopt the ‘metric,’ and we doubt whether it ever will become general among these people. If we were dependent on the French and Germans for all, or even a great part, of our scientific knowledge, we might feel it necessary to cater to their metric whim, but inasmuch as the great English-speaking people lead the world in science as applied to the useful arts, and to medicine and surgery in particular, there is nothing improper in their insisting that their European brethren shall come back to the old-time system from which they departed.”

It is obvious, from the quotations and facts we have here gathered together, that the American profession does not intend to adopt the metric system at present, and that it declines doing so, not out of a blind conservatism nor a national pride, but because the system has serious draw-

backs which have not yet been removed. Pharmacists, also, are, so far as we can learn, generally opposed to it; and while it is well for all physicians to be able to understand the metric method, both to read it and to write it, it were premature at this present time to adopt it in text books and treatises, or even in periodical literature. This may be considered as a general reply to the question we have been several times asked, why the MEDICAL AND SURGICAL REPORTER does not adopt it exclusively.

NOTES AND COMMENTS.

Therapeutical Notes.

METALLIC MERCURY IN SYPHILIS.

In the *Archiv. für Klin. Med.*, Dr. Furbringer recommends the hypodermic use of metallic quicksilver in syphilis. His formula is—

R. Hydrarg. depur.,	2.0
Mucilag. acac.,	10.0
Rub well together, and gradually add—	
R. Glycerin. puriss.,	10.0

This makes a permanent emulsion, not readily oxydizable. The absorption of mercury in this form is very gradual and efficient. About half a syringeful (= 0.050 metallic mercury) is an average dose.

A CHEAP ANTISEPTIC.

A new and cheap antiseptic is made by dissolving in water equal parts of chloride of potassium, nitrate of sodium, and boracic acid, filtering and evaporating to dryness. It is easily soluble in water, and is deliquescent. It passes under the unscientific name of double borate of potassium and sodium, and its action as an antiseptic is said to be prompt, and to continue undiminished for a long time. It is a good application, in solution, to ulcers, foul wounds, etc.

SEA WATER GARGLE IN CHRONIC CATARRH.

Professor Mosler, of Greifswald, says, in the *Berlin. Klinische Wochenschrift*, June 2d, 1879, that he has for some years most successfully treated patients with chronic catarrh of the throat by gargling with sea water. Special rooms for gargling have been erected on the seashore in some watering places, according to his directions. It is, however, essential that the patients should be given special directions how to gargle. As the affection is generally located in the naso-pharyngeal space, it is necessary that part of the water should come in contact with the nasal cavity. In order to attain this, the garg-

ling movements must be combined with movements of deglutition. A marked improvement in the state of the patient follows as soon as the latter has acquired this particular art of gargling.

BROMOHYDRIC ACID IN ULCER OF THE STOMACH.

A writer in the *Lancet* says he has found this acid useful in the treatment of chronic ulcer and other painful diseases of the stomach. It arrests the obstinate vomiting attendant on these diseases when all other means fail, thus enabling the stomach to retain food and medicines. By thus resting the stomach, bromohydric acid favors the administration of other remedies, and must expedite the cure when the case admits of it. He gives twenty minims to half a drachm in an ounce of water, every two hours at first, gradually reducing it to three or four times a day.

The Management of Opium and Morphia Poisoning.

Readers will remember that Dr. Sholl recited, some time ago, in the *REPORTER*, a case of morphia poisoning successfully treated by veratrum viride. In the *Lancet and Clinic*, Dr. J. S. Halde-mann adds to this a similar instance from the *Cosmos*, and concludes a general review of the physiological antidotes of morphia with these words:—

"I have great faith in the veratrum viride as an antidote to morphia poisoning. It is undoubtedly a powerful alterative and nervine, and has indisputable arterial sedative virtue. Therefore, should I be required to treat a case where the deep, hypnotic effects of morphia had to be counteracted, I should be inclined, most certainly, to give this article the first, and a fair trial. If it then should fail me, my next resort would be strychnia; and if disappointed in it, then belladonna would 'come in' for a trial, together with such topical applications and remedies as would naturally and rationally suggest themselves."

The Sclerostoma or Anchilostoma Duodenale.

On page 40 of this volume a case of this parasite in this country is noticed, and its frequency in Egypt mentioned. Since then we see in an exchange that Dr. P. Sonsino, an Italian physician, found that in nine neuroscopies made in Cairo, seven of the cadavers contained this parasite. In a communication made last year to the *Società Medico-fisica*, of Florence, he stated that these worms are found firmly attached to the mucous membrane of the duodenum and jejunum; after eroding this membrane they suck out the

blood, and thus abstract it from the individual. When there are many present a considerable amount of blood is lost, and hence there is more or less intense anæmia. In a woman dying of anæmia perniciosa progressiva at the hospital in Florence, the intestines were found to be very thin, pallid, and almost transparent. Hundreds of the parasites were found in the jejunum, and a number in the ileum. They were dead, and attached to the mucous membrane, which presented corresponding grayish ecchymoses. No other lesions were found sufficient to account for the profound anæmia.

Report of the Philadelphia Board of Health.

This valuable document makes a volume of nearly four hundred pages. The portion devoted to the statistics of births, deaths and marriages occupies nearly a third of this. They relate to the year 1876, and have been most carefully compiled and arranged by Dr. Wm. H. Ford, now President of the Board, and Dr. R. A. Cleemann. Many curious results are reached: as that in this city the excess of male over female births is considerably above the average; that the birth rate among the colored population is deficient and their number almost stationary; that the autumn and winter months are invariably the most prolific, and the spring months least so; that after the crisis of 1873, there was and continues a marked decrease in the number of marriages; that nearly one-half the deaths occur before the completion of the tenth year, and nearly one-quarter (24.09) before the completion of the first year; and many more. The relation of sewer gas to typhoid fever is fully discussed, and the connection affirmed to be close. A large number of charts and diagrams are inserted, and a very careful meteorological record.

The report of Dr. W. M. Welch, physician in charge of the Municipal Hospital, is particularly full on the subject of smallpox and its complications.

Varieties of Psoriasis Palmaris.

Dr. Wm. Cottle writes to the *British Medical Journal*—

I am in the habit of recognizing five distinct diseases that are wont to occur on the palm or sole without other parts being necessarily simultaneously involved, and which may present a not very dissimilar appearance, namely, eczema, psoriasis, syphilis, lichen ruber, and erythematous lupus. I have frequently met with psoriasis in this situation as part of the general

non-syphilitic disease, often in gouty subjects, and with no coexisting eczema. There is also a form of palmar psoriasis to which the late Mr. Naylor first called my attention, and which, for the sake of distinction, he was in the habit of designating "non-specific palmar psoriasis." In these cases the skin of the whole palmar surface of the hand, fingers and thumb is red, thickened and hard, and the natural furrows of the skin occupied by small white scales, so that the whole surface is mapped out with fine white lines. No cracks nor fissures are present, and the part is always dry and harsh, and generally hot and irritable. The condition may exist with or without psoriasis in other situations, and nearly always occurs in women.

Commercial Impositions on the Profession.

In the September number of the *Chicago Pharmacist and Chemist* a striking example of the imposition practiced on the profession by some unscrupulous drug firms is mentioned. A circular issued by Merrill, Thorp & Lloyd, of Cincinnati, is quoted, advertising *alstonia constricta* as an agree cure, ingeniously intimating that its great value may soon make it quite scarce, and offering the powdered plant at \$1.00 per ounce. The regular wholesale price in New York city, of this almost worthless drug, is 85 cents to \$1.00 per pound!

It is a duty which we cheerfully perform to put our readers on their guard against all firms who endeavor to exploit the profession in this manner.

Mesmeric Anæsthesia.

An interesting illustration of this curious condition is reported to the *New Orleans Medical and Surgical Journal*, by Dr. E. L. Day, of Texas. It is as follows:—

"Willis Francis, colored man, about 25 years of age, had his great toe badly injured by having heavy iron rollers fall upon it. About ten days after the injury he consulted Dr. Legreud, who decided to amputate, and as an experiment, called upon Mr. James Armstrong, of this place, who claims the power of magnetization, to exercise this influence on his patient. The magnetizer commenced by passing his hands slowly and steadily in front of the patient's face for a period of five minutes, when he closed his eyes as though in sleep. The doctor then performed the operation, the patient remaining all the while in a state of complete anæsthesia. By simply snapping his fingers sharply in the patient's face the influence was removed."

Fracture of the Fetal Skull from Uterine Contraction.

The following case given by the Vienna correspondent of the *Canada Medical Journal* is one of great interest, not only to the obstetrician but also to the medical jurist. It proves that uterine muscular action alone is sufficient to cause fracture of the head of the fetus. A powerfully-built woman, aged thirty-seven, was admitted into C. Braun's wards, in her ninth pregnancy. The previous eight labors were all severe. During the course of the labor rupture of the uterus took place, and a dead child was removed from the peritoneal cavity by abdominal section. The mother lived twenty-four hours. On post-mortem the uterus was found to be greatly hypertrophied. A rent 15 ctm. in its long diameter (transverse) was found in the cervical region, through which intestines protruded. The antero-posterior diameter of the inlet was considerably narrowed. On examining the child's head, the parietal bones superiorly were found to be completely separated, and a fracture in the right one 4 ctm. in length. There was effusion of blood upon the meninges.

Physiological Effects of Brucine and Strychnine.

Dr. Lautenbach reports experiments with these agents, in the *Medical Times*. His conclusions are as follows:—

Brucine treated with acetic acid injected into a *Rana temporaria*, in the proportion of one part of the alkaloid to about fifteen hundred parts by weight of the frog, produces a non-excitability of the motor nerves, through a direct action on these structures.

Brucine treated with hydrochloric acid produces the same effect in the *Rana temporaria*; but in the *Rana esculenta* it, in much smaller doses, paralyzes the motor nerves without having previously induced tetanus.

Strychnine treated with acetic or hydrochloric acid produces in the *Rana temporaria* paralysis of the motor nerves in one-sixth the dose necessary for brucine to produce the same effect

Bright's Disease.

The eminent Professor Bamberger has contributed a very able study of this disease to the *Pesth Med. Presse*. He believes that it is very much more frequent than is generally supposed, and often is not recognized by the attending physician. He does not believe in the modern divisions into parenchymatous and interstitial nephritis, and thinks it better to adhere to the old view, that the disease is one and single, presenting itself, however, either in primary or

secondary form, acute or chronic, etiological or symptomatic. He finds in phthisis 16 per cent., in aortic disease 9, in pregnancy 6, in chronic skin disease 5.2, in general urinary disease 5.5 per cent. of patients have albuminuria. In alcoholism he found but 4.8 per cent., and expresses his doubts whether this plays such a role in causing Bright's disease as many have said.

Evidences that Dead Infants were Born Alive.

At the conclusion of a close study of this subject, Dr. S. W. Abbott states, in the *Boston Medical and Surgical Journal*, that the medical examiner may infer that a child has lived during and after its birth, from the following signs:

1. When the diaphragm reaches only to the fifth intercostal space.
2. When the lungs more or less completely fill the thorax.
3. When the ground color of the lungs is broken by insular marblings.
4. When, by careful experiment, the lungs are found to be capable of floating.
5. When a bloody froth exudes from the cut surfaces of the lung on slight pressure.
6. When the air cells are visible to the naked eye.

These proofs, complete as they are, may be strengthened by the cicatrization of the umbilicus, the scaling of the epidermis, the closure of the foetal ducts, the size of the osseous nucleus of the inferior femoral epiphysis, the existence of milk, sugar, starch, or medicines in the stomach, determined by the appropriate chemical tests, and by the presence of fecal matter other than meconium in the lower intestines.

Another Discoverer of the Circulation of the Blood.

It is generally believed that Servetus was the first to describe the pulmonary circulation. M. Chéreau, in the *Revue des Deux Mondes*, brings great learning and research to prove that Servetus must no longer be credited with this discovery. It was Realdo Colombo, "the Claude Bernard of the sixteenth century, the type of the true *savant*, the enemy of hollow theory, the lover of truth, and seeking it in vivisection"—it was Colombo who first recognized the physiology of the lesser circulation, according to M. Chéreau.

It is true that Harvey himself attributes the discovery of the lesser circulation to Columbus, and the latter claims it distinctly for himself; but it is also true that the work of Servetus was published before that of Columbus, and is, in one respect, more accurate—to wit, that he denies

any direct communication between the ventricles of the heart.

How to Gargle the Naso-pharynx.

When the gargle is designed to reach the naso-pharynx, Dr. Löwenburg recommends the following method:—

The patient inclines the head horizontally backward, and performs movements which we may call "quasi-deglutition," not including the last portion of this physiological action, definite swallowing. The liquid is passed much higher behind the soft palate than the ordinary method of gargling will permit; some persons succeed so well in this manœuvre that they are able to reject by the nose the liquid which has been received by the mouth. Moreover, these rapid muscular contractions completely detach the abnormal secretions, which can then be easily expelled, and the greatest possible relief is thus given to the patient.

Tayuya as an Anti-Syphilitic.

We have at various times referred to the tincture of tayuya as an alleged anti-syphilitic. It is prepared from a Brazilian plant, and has been tried especially in Italy. Dr. Ciro Betelli has lately submitted it to a careful chemical examination, and has isolated two active principles, both poisonous, of the class of narcotic paralyzants. Prof. Tantarri gave the tincture a full trial in the hospital of St. Ursula, Bologna, and pronounces the opinion that it does not in any way modify the development of syphilis. Dr. Pedrelli reports two cases with similar negative results.

On the testimony of these witnesses, whom we quote from the *Journal des Sci. Méd.*, of Louvain, we think tayuya may be dismissed as valueless, at least so far as its action in syphilis is concerned.

Sanitation in Yellow Fever.

Many of the Southern physicians doubt whether the most careful precautions materially influence the spread of yellow fever. Dr. J. H. Herrick, one of the editors of the *New Orleans Medical Journal*, for instance, says, in a recent note—

As to local sanitary conditions, observation amply proves that yellow fever is not mitigated by good nor aggravated by bad sanitation. The three conditions needed for a prevalence of the disease are subjects susceptible to its specific cause, the presence of this cause, and a temperature high enough to render it active. Eliminate one, and the other two fail.

Responsibility of the Insane.

In cases of partial insanity the responsibility of the sufferer is constantly a vexed question. Among late studies of the subject is one by Dr. T. L. Wright, of Bellefontaine, Ohio, which appears in the Cincinnati *Lancet and Clinic*. He reaches the conclusion that the partially insane are always responsible; that they are never responsible in an equal degree with the sane; that they cannot justly be held responsible in the same manner or kind in which persons of sound mind are held; and finally, that as a corollary from the above conclusion, it is claimed that it is the duty of the State to provide a place of confinement for the criminally insane, different from jails and penitentiaries, and different also from the ordinary insane asylum.

The Alkaloids of Squills as Diuretics.

The hypodermic injection of the various alkaloids of squills has been tested by Dr. Frommüller, and the results given in the *Memorabilien*, No. 6, 1879. It is well known that squills contain an acrid narcotic poison. In Merck's famous laboratory three alkaloids have been extracted, *Scillitoxin*, *Scillin* and *Scillipicrin*. The first mentioned contains largely the poisonous principle, the second occurs in very small quantity, while the third is not at all poisonous, is tolerably abundant, and easily soluble in water. Dr. Frommüller found it to take the first rank as a diuretic. In fifteen cases of oliguria it doubled the discharge, or more, in all but one, and in that considerably increased it. The local irritation was easily met by ice applications.

Arsenic in Cardiac Disease.

The effect of arsenic on the heart is not alluded to in the works of Hayden or Fothergill (at least not in their indexes); nor does the "National Dispensatory" speak of it in this connection.

Dr. Darwin, the father of the present eminent philosopher, was probably the first to notice the specific action of arsenic over the nervous system and heart. He administered a saturated solution of arsenious acid in a case of heart disease with surprising effect. Full doses of the more soluble preparations of arsenic produce retardation of the heart's action, an effect said to be due to paralysis of the motor ganglia, or rather to a limiting action of the remedy, which renders the muscular tissue of the heart less irritable.

CORRESPONDENCE.

FOREIGN.

The International Medical Congress.

AMSTERDAM, HOLLAND, Sept. 12th, 1879.

ED. MED. AND SURG. REPORTER:—

I cannot permit to pass unnoticed such an interesting occasion as the meeting of the "International Congress of Medical Science," holding its sixth annual session, this year, in the interesting city of Amsterdam. Accordingly I send you a few lines concerning the position of Prof. L. A. Sayre and his associates, who during the sittings of this Congress are looked upon as representative Americans.

The distinguished and learned Prof. Donders, of Utrecht, a most noble man, with a warm and generous heart, and who does honor to the specialty of ophthalmology, has been elected President. In this choice the Congress displayed its good taste, for the honor was certainly merited. Soon after taking his chair the President announced the various Vice-Presidents, who, as a rule, were men renowned in their respective countries. Among them was Dr. Sayre, whose appointment was received by the Congress with unanimous applause. As he stepped upon the platform to acknowledge the compliment, his elegant physique and grand head made me feel proud of my country's representative. And I would mention in passing, that no other man, with the exception of our noble "Gross," has done so much toward paving the way for the proper reception of American medical men in Europe. Dr. Sayre's wonderful fund of knowledge, and his facility of manipulation of the joints of the human body, coupled with his natural eloquence and noble unselfishness, makes every lover of his profession estimate him most highly. These attractive features in his character, and his enviable position of President elect of the American Medical Association, have been appreciated, not only by his colleagues throughout Holland, but also by the citizens of Amsterdam.

Not to be outdone by the attentions he has received, he yesterday gave a dinner, which was in every respect worthy of the occasion. Some fifty gentlemen sat down in one of those rarely furnished rooms in the "Maison Zomerdijk Bus-sink," which by its size and appointments is so well adapted for both comfort and entertainment. After full justice had been done the viands before us, and the bill of fare was all the greatest connoisseur could have desired, our host announced the toasts, prefaced by the following remarks:—

"Standing here, in the presence of the representative of my country in Holland, Mr. Axerme, our American Consul, and under my native flag, I thank you all here present, from the bottom of my heart, for the great honor that you have done me in coming to this place, and for the pleasure that I now feel in having your company."

Then followed a manly and most excellent speech from the American Consul, also speeches from the Amsterdam Council. Most admirable and appropriate were the remarks of each medi-

cal representative, especially those of Prof. Lister and Ernest Hart, Esq.

The remainder of the evening was devoted to a musical and dramatic entertainment, under the auspices of our confrères of this city, and so ended one of the most admirable reunions of the medical men of Amsterdam.

Enclosed please find a detailed programme of the proceedings of this Congress.

LAURENCE TURNBULL, M.D.

Puerperal Convulsions.

ED. MED. AND SURG. REPORTER:—

It has been the misfortune of the writer to meet recently, 15th inst, his second case of this kind the current year, and as the result in a typical case follows a certain line of treatment, it may be well to advert to it now, as was done in the case of February, reported in this journal. The frequent failure of our best directed and most assiduous efforts in this fearful trouble should at least lead us to reflect on that which holds out the best chance, as time is life here, while delay or indecision is death.

Sunday, September 15th, 6 A.M. Mrs. M., primipara, age 20, 8 months gone. Sanguine and of full habit, slight general anasarca. First convulsion came at 8.30 A.M., in her sleep, waking her husband by its violence. Her fifth convulsion had just passed off. Inserted at once, hypodermically, $\frac{1}{2}$ grain morphia and ten drops fluid ext. veratrum viride. While trying to cord the arm another violent convulsion came on, immediately after which she was bled from a free orifice, rapidly, to three pints, under which perfect quiet of respiration and soft steadiness of circulation were brought about. In 45 minutes another convulsion came; bandage was taken off and she was bled two pints more, till she became perfectly quiet. From this there was no return of convulsion. A malarial complication being suspected, 20 grains of calomel mixed with butter was put in her mouth. At 9 P.M., in a semi-conscious state, she asked to relieve the bladder, and passed one pint of urine, smoky-black in color. From midnight she was able to take quinine freely; slight pains came on Tuesday, but quieted down. Quinine again from Tuesday midnight. At 6 A.M. Wednesday she was fully conscious. Labor then set in regularly. At 9 P.M. gave birth to a living child, and at this writing has progressed to a happy convalescence, intent on eating, both child and mother living and thriving.

EDWARD H. SHOLL, M.D.

Gainesville, Ala., Sept. 22d, 1879.

Morphia in Asthma.

ED. MED. AND SURG. REPORTER:—

In Vol. XLI, No. 13, Dr. S. Leslie West mentions the hypodermic use of morph. sulph. as a successful method of alleviating the sufferings of patients afflicted with asthma, and by way of apology states that he has not seen this treatment mentioned in medical literature.

Niemeyer, in his "Text Book of Practical Medicine," refers to it, and Hartshorne, in "Essen-

tials of Practical Medicine," states that, according to the practice of Hirtz, "Hypodermic injections of morphia have sometimes given immediate relief."

I would also add that I have frequently given morphia hypodermically in asthma, in hospital practice, while interne in the City Hospital, of St. Louis (1876), and always with beneficial results.

In private practice I have not resorted to hypodermic injections, for the reason that I have not had a case that would not yield to the use of potassium iod. in an infusion of senega (or combined with the syrup) and the inhalation of the fumes of stramonium and nitre.

There is this objection against the use of morphia hypodermically, that patients are very liable to become habitual consumers of this drug, and thus "jump from the frying pan into the fire."

A. H. MEISENBACH, M.D.

Muscutah, Ill.

The Decimal System Again.

ED. MED. AND SURG. REPORTER:—

The prompt adoption of the metric system by the medical profession is surely a strong and telling refutation of the idea that the profession clings to old and antediluvian notions and systems, simply because they are old and have become generally used. But it is always best to make haste slowly. It certainly is not a perfect system of weights and measures to adopt, if it is necessary, as Dr. Prince suggested in his last article, published some time ago in the *American Practitioner*, "to furnish his apothecary a table of approximate equivalents." It is generally understood, I think, that a prescription should be so written as that any competent druggist may fill it. In late numbers of the *REPORTER* Drs. Merrick and Connor propose to inaugurate the new system on this plan. They will have one grain represented by .06, but sixty grains will not be 3.6 but 4. This discrepancy it is proposed to drop. Now, I am in favor of the new system, but I don't think it is just the thing to have an "understanding with your druggist." Better learn the system as it is and should be learned, and then let the druggist do likewise, and he will have no trouble. The new system, if of any value, must be alike everywhere.

Le Claire, Iowa. J. A. DE ARMOND, M.D.

NEWS AND MISCELLANY.

Personal.

—Dr. Julius Klob, Professor of Pathological Anatomy at the University of Vienna, died recently, of typhus, at the age of 49 years.

—The death of M. E. Chassaignac, the celebrated surgeon of the Lariboisiere Hospital, Paris, and the inventor of the *écraseur* and drainage tube, took place August 26th. He was born in 1805. His clinics were very popular, but several years ago he retired from the active duties of the profession. We remember him well "twenty golden years ago."

College Items.

—The Jefferson and University, of this city, have opened with full classes. Dr. Roberts Bartholow delivered the introductory address in the former.

—The Cincinnati Colleges have lately made a commendable advance, by raising their fees, and we are glad to report that instead of a falling off in the number of students, there is an actual increase over past years at this time in the season, and by another year it is said they will all be in condition to take steps in placing themselves on the same plane with Harvard, the University of Pennsylvania, Chicago Medical College and Bellevue Hospital Medical College, which last mentioned has announced that after the session of 1879-80 it will adopt a graded three years course with final examinations in the elementary branches at the end of the first and second sessions; the examinations for graduation at the end of the third session being confined to the branches of Practice of Medicine, Surgery and Obstetrics.

Alarming Prognosis of Protoplasm.

At the last meeting of the British Association for the advancement of science, Professor Huxley actually indulged in some fun at the expense of the primordial "basis of life," or protoplasm, which some years ago he and Hæckel had christened *Bathybius*. The Professor said his young friend Bathybius was a youth of great promise, but had not turned out so well as his friends expected. A gentleman present made the following summary of Dr. Allman's address, as President of the Association:—

From life to consciousness the chasm
Cannot be bridged by protoplasm.
All flesh is grass, but chlorophyll
Can all man's duties not fulfill.

Moral:—Be not in haste to pin your faith to the dreams of "great thinkers."

Ohio Anatomy Act.

At last Ohio has an anatomy act. It was passed last June, and goes into effect January 1st next. It enacts that the unclaimed bodies of those dying in public institutions shall, "on the written application of the professor of anatomy in any medical college, or the president of any county medical society, deliver to such professor or president, for the purpose of medical or surgical study, or dissection, the body of any person who has died in either of the said institutions, from any disease not infectious, if such body has not been requested for interment by any person at his expense." No State has more urgently needed such a law.

The Yellow Fever.

The *Bulletin* of the National Board of Health observes—

The most striking feature in the comparison of the fever of 1878 with that of 1879 is the wide diffusion of the pestilence in the former as compared with the latter year. Not only did it

spread rapidly through the cities which it attacked last year, but it extended quickly to neighboring villages, which it remorselessly decimated. At this period last year it was reported that the "fever prevails in a number of small towns in Louisiana, Mississippi and Kentucky." Its progress is very different this year. In Memphis its course is slow, while in New Orleans it has been completely arrested. Thus far it has attacked but few small towns, and in those it has been summarily stamped out.

Items.

—In the recipe for koumiss, page 280, an obvious misprint occurs: "carbolic" for "carbonic acid."

—Attention is directed to the advertisement of the gentleman who advertises for a partnership in this number.

—An instance of heredity in crime is furnished by Elias Phillips, of Freetown, Mass., who recently appeared as a witness in a burglary trial, having turned State's evidence. He is a great grandson of Malbone Briggs, a notorious criminal, who was in State prison with seven of his sons at one time. Briggs' ancestry is traced back to a noted pirate in the time of Earl Bellamont, and his branch of the family has for over a century furnished noted criminals in every generation.

QUERIES AND REPLIES.

Morphia in Asthma.

MR. EDITOR:—If Dr. West, of Wilmington, Del., see REPORTER of Sept. 27th, page 284, will add $\frac{1}{2}$ grain sulph. atropia to his dose of morphia, in his asthma cases, he will, I am satisfied, find he will need less morphia, and his puncture will give larger respite, and act better in every way. I have treated spasmodic asthma by hypodermic use of morphia for four years, and for the last two years always combined with sulph. atropia.
Ironton, Tenn. S. W. CALDWELL, M.D.

Dr. J. B. H., of N. Y.—You can order French and German medical periodicals through E. Steiger, 25 Park Place, New York city. He has a catalogue of them which he will send you on application.

Dr. H. P., of Ga.—English authorities no longer attribute gout to fruitly wines or alcoholic beverages, but to excessive nutrition.

Alva.—Browne's *Jurisprudence of Insanity* will probably meet your wants.

Student—Anybody has a right to call themselves Veterinary Surgeon in England, and to practice as such: the claim amounts to nothing.

MARRIAGES.

ARNOLD—SPIER.—In New York, at Trinity Chapel, on Tuesday, September 23d, by the Rev. Dr. Swope, assisted by the Rev. Dr. Houghton, Glover C. Arnold, M.D., and Emily, daughter of Judge Gilbert M. Spier.

BOND—BARNES.—On the 25th ult., by the Rev. William H. Neilson, Frank H. Bond, of this city, and Miss Mary Barnes, daughter of the late Dr. John R. Barnes, formerly of Camden, N. J.